Exclusive DATAMATION / Price Waterhouse IS Trend Survey p. 106

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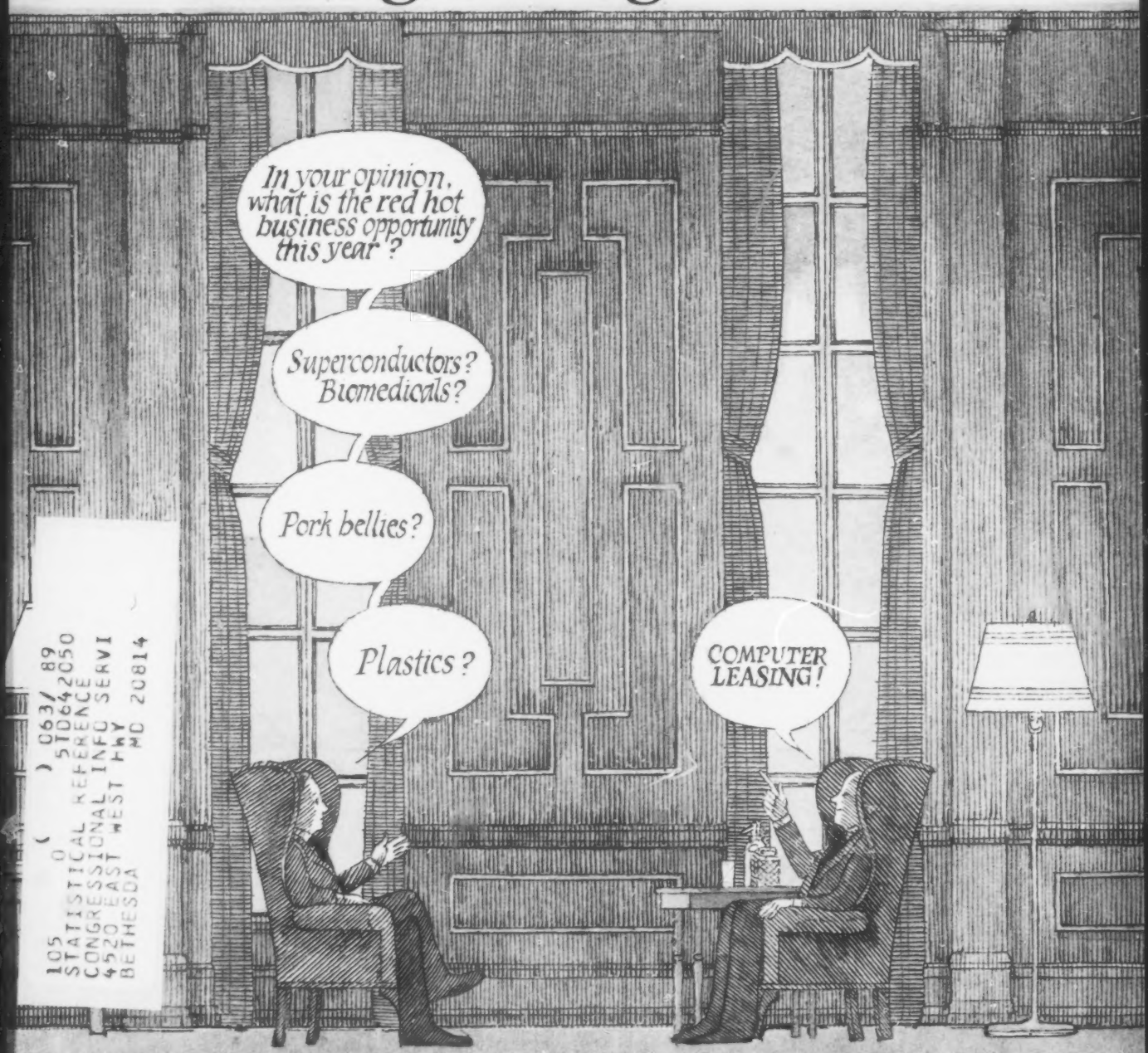
Leasing Strategies for '88



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Plus:

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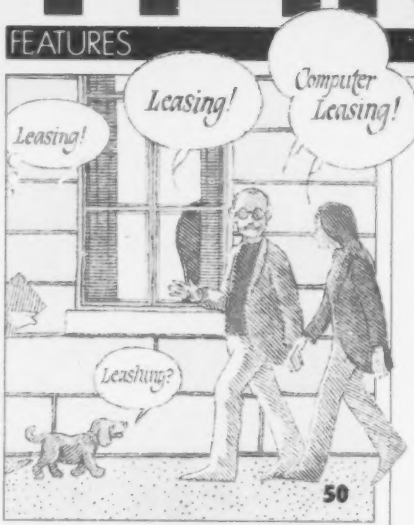

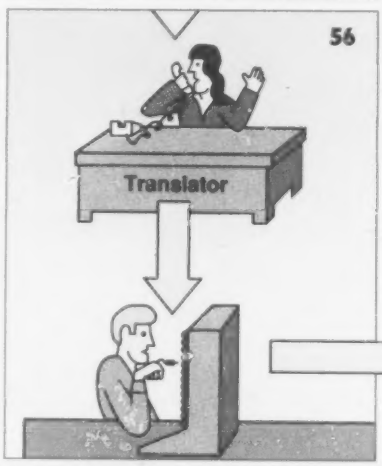

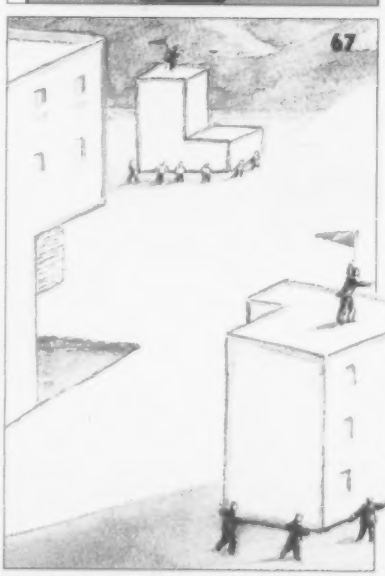

50 **Leasing Strategies for '88**
BY DAVID STAMPS
Users are finding that it's a computer lessee's market these days; rates are down at least 10% to 12% and many are writing terms most favorable to themselves into contracts. This is just one year after amateur Nostradamuses had established as common wisdom that computer leasing rates were surely headed up. What they failed to foresee was the aggressive arrival to the market of the Bellco leasing subsidiaries.

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BY BILL MUSGRAVE
It was not so long ago that the battle between vendors over LAN media and topology was obscuring the network benefits for users. Well, war is over. Networks are being installed at a record pace, as pcs and workstations spur demand for full connectivity, aided and abetted by the layered communications model drawn by OSI.

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The absence of comprehensive test plans can spell disaster for a company trying to renovate its systems to support new business strategies. Price Waterhouse has conducted major studies of large-scale renovation projects; their observations on effective planning and the execution of comprehensive tests are included herein.

ION

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Managing IS at Multinational Corporations

The DATAMATION Connectivity Survey: The Haves and Have-Nots

Workstation Graphics: Blossoming for Business

FEBRUARY 15, 1988
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1987 JESSE H. NEAL AWARD

Editorial

IBM's Latest Medicine

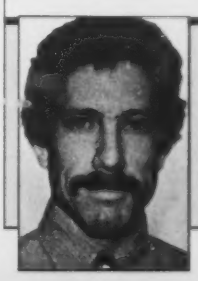
Before the invasion of pcs and the rise of connectivity, there was a popular saying in the computer industry: "When IBM sneezes, the industry catches cold." The theory, evidently, was that IBM was the controlling force in the industry economy; if things were going well for IBM, then the rest of the industry would do well, too. In the last few years, this notion has been shaken, due to international economic and technology trends, successful competition, and the rise of user independence. But perhaps the most salient factor in this loss of control has been IBM's own ability—or inability—to provide users with the solutions they want and need.

So, it comes as little surprise that to address its current ills IBM has once again resorted to a well-worn technique: reorganization. In forming five "highly independent" business units and inserting a layer of management between them and Armonk, IBM will, says chairman John F. Akers, "make decisions closer to customers and bring development and marketing closer together."

It's pretty clear from the announcement that IBM sees its main challenges to be in software and connectivity. Indeed, the new IBM United States organization has as one of its chief responsibilities "providing systems that interconnect effectively." Moreover, Akers has continualiy stressed the importance of SAA, the company's still evolving strategy to link its incompatible product lines.

But apart from the salutary efforts at trying to get closer to customers and to provide better solutions in a more timely fashion, we believe IBM's latest moves also represent an attempt to reassert the control it enjoyed so much in the past. While we have some optimism about the former desire, we're skeptical about the latter. Although reorganization in and of itself won't inject into IBM the vitality necessary to produce better products, freeing its business units to make more decisions may enable the company to compete more effectively.

If the reorganization is also designed to recapture that fleeting glory of control, we think IBM is in for a disappointment. Times have changed. Computing power has become democratized. Users are more independent, and it remains to be seen whether they will allow themselves to be tied into all-encompassing architectures like SAA. The reality now may be that when IBM sneezes, it will be the only one who catches cold.



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Letters

Telecom Talent

I would like to take issue with David Stamps' article, "The Tough Search for Telecom Talent" (Dec. 1, p. 65).

Being involved with one such program, I would argue that university-sponsored telecommunications education is indeed making headway in supplying industry with needed telecom talent. Our Bachelor of Science Degree Program in Telecommunications offered through the State University of New York College of Technology in Utica is a shining example of how successful such an operation can be if properly administered. We have recruited full-time faculty with extensive telecommunications experience, along with adjuncts who are currently working in the field. We recently dedicated a telecommunications lab with state-of-the-art equipment, exclusively designed for the telecommunications department of the college. Our enrollment consists of over 100 students, of which only 5% are currently employed in the field. Perhaps our biggest asset is our program's advisory board consisting of industry executives, representing both the user and vendor communities. Finally, our summer internship program has been very successful in providing students with invaluable field experience along with opportunities for career placement upon graduation.

The telecommunications program at SUNY College of Technology currently boasts 100% placement, with graduates going to work for both users and vendors. Moreover, we have had very encouraging feedback from telecommunications employers regarding the overall quality of our students, including their ability to make some immediate contributions on the job. Our May 1988 graduating class will consist of about 50 students, so potential employers please take note!

PATRICK W. FITZGIBBONS
SUNY College of Technology
Utica, N.Y.

Biofeedback

"Building a Better Life" by Jeff Moad (Nov. 15, p. 47) accurately characterizes the growing significance of computer aided molecular design (CAMD) software in scientific research, and the importance of this emerging technology. However, we would like to correct the information on our company, BioDesign Inc., and on our software for CAMD.

BioDesign, founded in 1984, is headquartered in Pasadena, Calif. BioDesign's CAMD software, including Biograf, was developed internally by BioDesign scientists for analysis as well as simulation of biological, chemical, and material systems. Neither BioDesign nor any of our software are in any way affiliated with the University of California at San Diego. BioDesign's products have been developed for, and are currently used in, a variety of chemical industry segments internationally, including the pharmaceutical, biotechnology, polymer, and materials markets.

JEFFREY R. MARUSIN
Vice President, Marketing
BioDesign Inc.
Pasadena, Calif.

User Groups

If your "Directory of User Groups" (Dec. 15, p. 52) spurs some current nonparticipants to get involved in user groups, you will have done a good service. However, I have a bone to pick about classifying the SAS User Group (SUGI) as "independent."

SUGI is not an ongoing user group but a succession of annual conferences. And while the conferences are always chaired by users and a majority of the talks are given by users, the event is staged, showcased, subsidized, and generally SAS-wrapped by the vendor.

A SUGI conference is useful as a place for end users to make contact, but it is still a vendor conference.

BOB STEWART
AT&T
Piscataway, N.J.

Your recent listing of user groups was truly an outstanding job. User groups have been instrumental in assisting organizations in setting directions that will be beneficial to all involved. I know: our first user group in 1972 has been followed by a yearly international meeting, with local and product-specific groups meeting between our international get-together.

In the project management and lifecycle management applications, we quickly found out that users benefited when they listened to other users and their real-world experiences, rather than to theories in a classroom. No one could answer tough problems better than a manager who had to live through the same problems.

JOSEPH S. HERBETS
AGS Management Systems Inc.
King of Prussia, Pa.

EXCLUSIVE U.S. IS TREND FORECAST

DATAMATION/PRICE WATERHOUSE SURVEY

Crash Be Damned—Spending Up

BY NORMAN STATLAND

Over 60% of U.S. companies expect to increase their computer hardware expenditures over the next 12 months. This is the main finding of the computer opinion survey launched by DATAMATION last year in collaboration with the Management Consulting Services division of Big Eight accounting firm Price Waterhouse. Five hundred information systems executives, drawn from all industry sectors, have agreed to join the DATAMATION/Price Waterhouse opinion panel. Every quarter, the panel will report the pulse of information systems management trends.

In this first survey, the panel predicts some relaxation of the tight grip on hardware expenditures that three years ago flattened vendors' growth curve. However, not all of the increased hardware dollars for 1988 will go toward offering more information services to end users. Ascending prices caused by the weakening of the dollar will account for some of next year's higher budgets. Moreover, many IS executives are finding that there are significant cpu and I/O channel consumption costs associated with user friendliness; they expect to spend more just to stand still, as improved price/performance ratios are offset by the expense of the rising—but also apparently necessary—inefficiencies that accompany decentralization.

The financial industry, seemingly unabashed by recent stock market setbacks, emerges as the spending pacesetter: 68% of respondents expect to increase their hardware dollar investments and only 4% expect to spend less. This net of 64% of installations is up from the 56% national average. Least optimistic are computer services organizations, for which some overcapacity is anticipated; still, more than half of the computer services respondents (54%) report that they are counting on increased hardware budgets.

In financing the acquisition of more hardware, a small shift (4%) is predicted toward leasing, away from the present 65% who favor outright purchase. But the shift is greater in some industries. Eighteen percent of IS managers in utilities report they'll switch to leasing in 1988 (see "Who's Leasing? Who's Buying?").

Perhaps the biggest surprise that is revealed by the DATAMATION/Price Waterhouse survey is that, despite recent trends toward the use of applications packages and software development productivity aids (i.e., CASE tools), the applications software expenditure indicator lags far behind hardware. It shows that only a net 39% (47% up, 8% down) of respondents are budgeting for an increased outlay in the next 12 months. The figure reflects recognition of the time it takes for user organizations to absorb implementation of new applications systems. The best performers are education and research installations where generous discounts on hardware vendor-delivered systems software can be exploited; only a net 29% of these respondents expect to spend more on software in 1988. Government installations appear the most likely to increase software expenditures. A net 57% are budgeting for increases.

FEBRUARY 15, 1988

- **Communications people are in demand: 29% will recruit telecom specialists; only 1% will employ fewer communications managers.**
- **IS executives at utilities report they'll be leasing hardware more in 1988 than they have in the past: 18% say they'll move from purchasing to leasing.**
- **Some IS workers in the government can expect big raises of over 10%, but most will make do with less than 5%.**
- **In the education/research sector, fully 73% report that end users will control more computing dollars this year.**

The survey delivered a familiar call for recruiting more systems development staff. Thirty-seven percent of the country's installations expect to increase the number of analysts and programmers they employ during the next year. Only about 6% intend to get by with fewer staffers. The result of the continued pressure is likely to lead, as it has before, to increasing user request backlogs and extended use of less skilled people.

Where will the new people come from? Some interindustry shifts seem probable: 10% of installations in the financial industry are prepared to do with less staff, and an eager 48% of public utilities report they are prepared—subject to salary level—to take them on.

Salaries will not make major moves in the coming year: only 5% of companies in the survey expect to offer raises of more than 10% to their computer staffs this year; 45% of employers expect to offer raises lower than 5% in 1988. This national restraint is fairly level across industry boundaries, with the exception of the financial sector: so far, only 26% of the financial sector shops are prescribing such strong medicine. Predictably, government installations are the other exception—71% plan to hold salary increases to below 5%. Nevertheless, in what seems a major effort to match private sector salary levels, 10% of government installations (more than any other sector and 5% over the national average) intend to move into the big handout league, offering raises exceeding 10% and, in some cases, 20%.

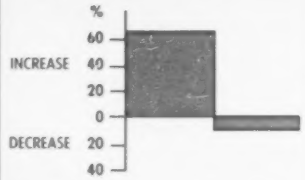
Much of the shortfall in systems development personnel will be made up through the use of external staff. Best chances for subcontractors and consultants are in the government sector, where 31% of installations plan to use their services. This is 8% above the national average and a solid 13% above the financial sector, site of the consultants' worst prospects for 1988. With only 18% of finance companies in the market for outside help, the signs say that brakes are being applied to systems development in this sector, and plans are being made for heavy hardware spending to cope with increasing workloads and new systems coming on-line.

The prospects for operations staff don't look good. A net decrease in employment in this category is likely, with a predicted 16% of companies employing more and 18% employing fewer. In all industry sectors, telecom specialists are in demand: 29% of U.S. installations plan to recruit them, and hardly any (1%) plan to relinquish telecom staff.

Some disenchantment with the results of moves toward decentralization is

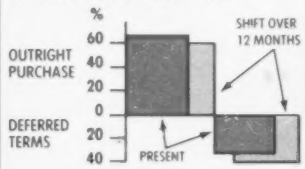
Trends for This Year

HARDWARE SPENDING



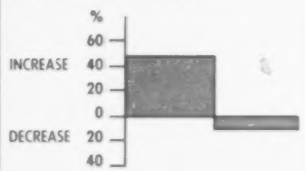
During the next 12 months, most of the panelists—61.5%—expect to spend more on hardware than in the last 12 months. Only 6.5% say they'll spend less, and 32% say they'll maintain last year's level.

PAYING FOR HARDWARE



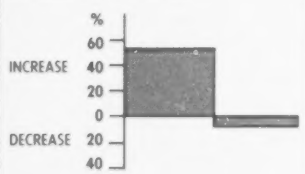
A third of the panelists report they currently lease or rent their hardware. Of the almost 20% who say they'll change, more will shift to leasing than to purchase.

APPLICATIONS SOFTWARE SPENDING



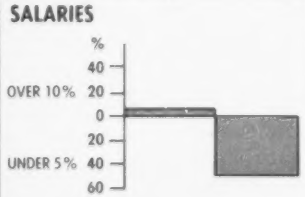
Forty-seven percent of the panelists report they'll spend more on applications software; only 8% say they'll spend less; and 45% say they'll maintain recent spending levels.

DECENTRALIZATION



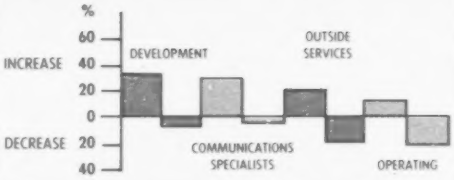
More than half the panelists say their organizations will spend more in the coming months on end-user-controlled hardware, software, and IS staff. About 43% say things will stay the same, and 3% say less will be spent.

SALARIES



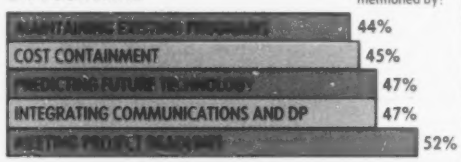
While 45% report that raises for computer staff will average less than 5%, half the panel say average raises will range between 5% and 9.9%.

STAFFING



Most panelists report they'll maintain current staffing levels. Still, 37% report they'll employ more programmer/analysts; and 29% say they'll hire more communications people. But almost 19% say they'll employ smaller operating staffs and hire fewer consultants.

ON YOUR MIND



Offered a dozen to choose from, panelists identified these perennial IS bugaboos as the top five issues now concerning them.

WHO'S LEASING? WHO'S BUYING?

(BY PERCENT)

Industry Sector	Current Method		Changing this year to	
	Purchase	Lease/Rent	Purchase	Lease/Rent
Process Manufacturing	62	38	5	12
Education/ Research	76	24	10	10
Government	76	24	12	4
Finance	66	34	3	14
Other Manufacturing	72	28	10	17
Utilities	51	49	13	18
Retail/ Distribution	57	43	6	13
Computer Services	62	38	8	10
Total	65	35	8	12

Utilities lease more of their hardware than any other sector, the government leases the least. Utilities also lead those that are changing their method, with 18% moving to leasing, fewer shifting to purchase.

Methodology

On Oct. 20, 1987, questionnaires were mailed to 3,000 DATAMATION subscribers. Of these, 1,500 are IBM mainframe users; 450 non-IBM mainframe users; and 1,050 are located at minicomputer shops. All 3,000 had titles in dp/MIS management. The executive panel was chosen from this population. At the same time, similar panels of IS execs in Europe, Asia, and Australia were being polled with parallel questionnaires. The results of this global survey will appear in an upcoming issue.

apparent among IS executives. The availability of both lower-cost hardware and improved communications facilities, however, will continue to drive the trend: about half the panel (a net 51%) report they will implement further end-user control over IS services in 1988.

As the IS executive relinquishes yet more power, what tops his or her worry list? Meeting project deadlines, the problem that has dogged IS since computers first infiltrated the payroll department, is still up there at number one. The attractions of fourth generation languages, it seems, have not yet persuaded the users to take this responsibility completely off the IS department's shoulders.

Three items tied for second place: the technical worries that will never go away; setting up sophisticated communications systems to facilitate further decentralization; and predicting future technology—the crystal ball seems to get mistier as each year passes.

With hardware spending showing only a modest upturn, why is cost containment still the number four headache? These are among the answers: most organizations have already tuned their hardware configurations to peak performance, milking the plug-compatible alternatives dry; and end-user demand is driving much of the increase in this year's predicted hardware expense. Shifting some responsibility for cost-justification for new end-user-driven IS services to those same end users may prove a help in the future.

Future DATAMATION/Price Waterhouse IS Trend Surveys will help clarify these subjects. In an upcoming issue, the survey goes international, comparing and contrasting IS trends from Asia and Europe with U.S. results. ■

Norman Statland is National Director of Information Resource Management Services at Price Waterhouse. He is author of Controlling Software Development *(John Wiley & Sons, New York, 1986).*

This is the first of what will be a continuing series of quarterly surveys conducted by DATAMATION and the Information Resource Management Group at Price Waterhouse, a leading global professional organization of accountants and auditors, tax advisors, and management consultants. Four times a year, a panel of IS execs chosen from a list of DATAMATION's U.S. subscribers will be asked to comment on trends in staffing and hardware and software spending.

In later issues, the results of the U.S. surveys will be compared to the results of similar surveys being carried on simultaneously in Europe and Asia.